

西藏银莲花属三新种

王文采

(中国科学院植物研究所系统与进化植物学国家重点实验室, 北京 100093)

摘要: 描述了自西藏发现的毛茛科银莲花属三新种, 墨脱银莲花 *Anemone motuoensis*, 短蕊银莲花 *A. brachystema* 和加查银莲花 *A. jiachaensis*, 并给出其等与近缘种的区别特征或其等的独特特征。

关键词: 毛茛科; 银莲花属; 新种; 西藏

中图分类号: Q 949

文献标识码: A

文章编号: 2095-0845(2014)04-449-04

Three New Species of *Anemone* (Ranunculaceae) from Xizang

WANG Wen-Tsai

(State Key Laboratory of Systematic and Evolutionary Botany, Institute of Botany,
Chinese Academy of Sciences, Beijing 100093, China)

Abstract: Three species of the genus *Anemone* (Ranunculaceae), *A. motuoensis*, *A. brachystema* and *A. jiachaensis*, are described as new from the Xizang Autonomous Region. The diagnostic differences between them and their allies or their specific characteristics are given.

Key words: Ranunculaceae; *Anemone*; New species; Xizang

Anemone motuoensis W. T. Wang, sp. nov.

Fig. 1: A-D

[Sect. *Begoniifolia* (Ulbr.) Tamura]

Species nova est affinis *A. begoniifoliae* Levl. & Vant., quae foliis majoribus usque ad 8.8 cm longis ad 8.4 cm latis indivisis vel 3-5-lobatis, floribus in umbellas dispositis praecclare differt.

Small perennial herbs. Rhizome 2.5–3 cm long, 8–10 mm across, from apex putting forth 2–3 basal leaves and 1 scape. Basal leaves long petiolate; blades papery, pentagonal, 1–1.5 cm long, 1.6–2.2 cm broad, at base cordate, 3-sect, central segment rhombic, 3-lobed, secondary lobes near apex with a few teeth, lateral segments obliquely and broadly obovate, unequally 2-parted; surfaces adaxially appressed-puberulous, abaxially appressed-pubescent; petioles 1.5–3.5 cm long, with scape

sparingly pubescent. Scape 5–7 cm tall; inflorescence 1-flowered; involucre bracts 3 verticillate, sessile, unequal in size, broadly ovate or narrowly obovate, 6–7 mm long, 3–6 mm broad, 3-parted or 3-lobed (lobes 3-lobulate or undivided), adaxially appressed-puberulous, abaxially glabrous; pedicel 7–12 mm long. Sepals 5, pinkish, obovate or broadly obovate, 7.5–8 mm long, 6–7 mm broad, glabrous, apex rounded-truncate. Stamens ca. 30, glabrous; filaments filiform, 2.5–3 mm long; anthers narrowly rectangular, ca. 1 mm long. Gynoecium conical, ca. 3 mm long, 1.8 mm in diam.; carpels ca. 40, sessile, glabrous; ovaries dorsiventrally compressed, elliptic, 0.8–1 mm long, 0.3–0.7 mm broad, abaxially often inconspicuously longitudinally 1-ribbed; styles 0.1–0.2 mm long.

Xizang Autonomous Region: Motuo Xian, in

Received date: 2013-09-10, Accepted date: 2013-10-24

作者简介: 王文采 (1926-) 男, 研究员, 中国科学院院士, 从事有花植物分类学研究。E-mail: xiaobao@ibcas.ac.cn

the west of **Lage**, alt. 3 600 m, in *Abies* forest, herbs 5–7 cm tall, fls. pinkish, 1980–06–25, Plateau Group of Ecology Lab. 1037 (**holotype**, PE).

In having filiform filaments and dorsiventrally compressed and longitudinally 1-ribbed ovaries this species is related to *A. begoniifolia* Lévl. & Vant., but, differs in its smaller, 3-sect leaves and in its solitary flowers. In *A. begoniifolia*, the leaves are larger, up to 8.8 cm long, and to 8.4 cm broad, undivided or 3–5-lobed, and the flowers are arranged in umbels. (Wang, 1980).

Anemone brachystema W. T. Wang, sp. nov.

Fig. 1: E–G

[Sect. *Himalayicae* (Ulbr.) Juz.]

Species nova ob staminum filamenta linearia et carpella stylis subulatis praedita ad Sect. *Himalayicae* (Ulbr.) Juz. fortasse pertinet, sed ab omnibus speciebus sectionis floribus tribus in umbellam dispositis recedit.

Small perennial herbs. Rhizome ca. 8 cm long, 3 mm across, apex surrounded by dense withered leaves. Basal leaves ca. 5; blades chartaceous, cordate-ovate, 1.6–2 cm long, 2.5–3 cm broad, at base cordate, 3-sect, central segment broadly rhombic, ca. 1.8 cm broad, 3-parted, secondary lobes 3-fid or 3-lobed, ultimate lobules ovate or deltoid, lateral segments obliquely flabellate, unequally 2-parted; surfaces adaxially with margins villous, abaxially glabrous; petioles 1.5–4 cm long, with scape villous. Scape ca. 4 cm tall; umbel 3-flowered; involucre bracts 3, verticillate, sessile, subequal in size, narrowly obovate, ca. 1.4 cm long, 1 cm broad, at base connate, 3-fid, lobes lanceolate-linear, adaxially and abaxially white-villous (hairs 2.5–4 mm long); pedicels robust, ca. 8 mm long, villous. Sepals 4–5, broadly obovate or suborbicular, ca. 8 mm long, 6–8 mm broad, adaxially and abaxially sparsely sericeous, apex rounded. Stamens 18–20, 2–3 mm long, glabrous; filaments linear, 1–2 mm long; anthers oblong-ovate or broadly elliptic, 1–1.2 mm long. Carpels ca. 15, sessile, 3–3.5 mm long, gla-

brous; ovaries bilaterally compressed, elliptic, ca. 2 mm long; styles subulate, 1–1.5 mm long.

Xizang Autonomous Region: **Motuo Xian**, in the south of Duoxiongla Shan, on alpine meadow, 1980–06–24, Plateau Group of Ecology Lab. 10319 (**holotype**, PE).

In having linear filaments and carpels with subulate styles this species perhaps belongs to Sect. *Himalayicae* (Ulbr.) Juz., but from all species of that section differs in its three flowers in umbel arranged. In the species of Sect. *Himalayicae*, the flowers are either singly terminal, or two in simple monochasium arranged. (Wang, 1980; Tamura, 1995; Ziman *et al.*, 2007, 2008).

Anemone jiachaensis W. T. Wang, sp. nov.

Fig. 1: H–K

[Sect. *Stolonifera* (Ulbr.) Juz.]

Species nova ad Sect. *Stoloniferae* fortasse pertinet, a speciebus sinensis ceteris sectionis foliis basalibus ca. 12 (nec nullis vel 1–3), gynoecio e carpellis ca. 70 (nec 4–16) constanti distinguitur.

Perennial herbs. Basal leaves ca. 12; blades chartaceous, pentagonal, 1–2 cm long, 1.2–3 cm broad, at base cordate, 3-sect, central segment broadly rhombic, 3-lobed, secondary lobes near apex 2–3-denticulate, lateral segments obliquely flabellate or broadly obovate, unequally 2-fid or 2-lobed; surfaces adaxially and abaxially appressed-puberulous; petioles 2–6.5 cm long, spreading-pubescent. Scapes ca. 2, 9–18 cm tall, 1–2 mm across, appressed-puberulous; cymes 1- or 3-flowered; involucre bracts 3, sessile, unequal in size, rhombic-obovate or broadly rhombic, 3-lobed or 3-fid, lobes entire or 2–3-denticulate, on both surfaces puberulous; pedicels slender, 2.5–8 cm long, appressed-puberulous. Receptacle pubescent. Sepals 5, white, obovate-oblong, 1.7–2.2 cm long, 0.9–1.2 cm broad, adaxially glabrous, abaxially near apex and base sparsely puberulous. Stamens ca. 100, glabrous; filaments filiform, 2–3.5 mm long; anthers yellow, rectangular, ca. 1 mm long. Gynoecium

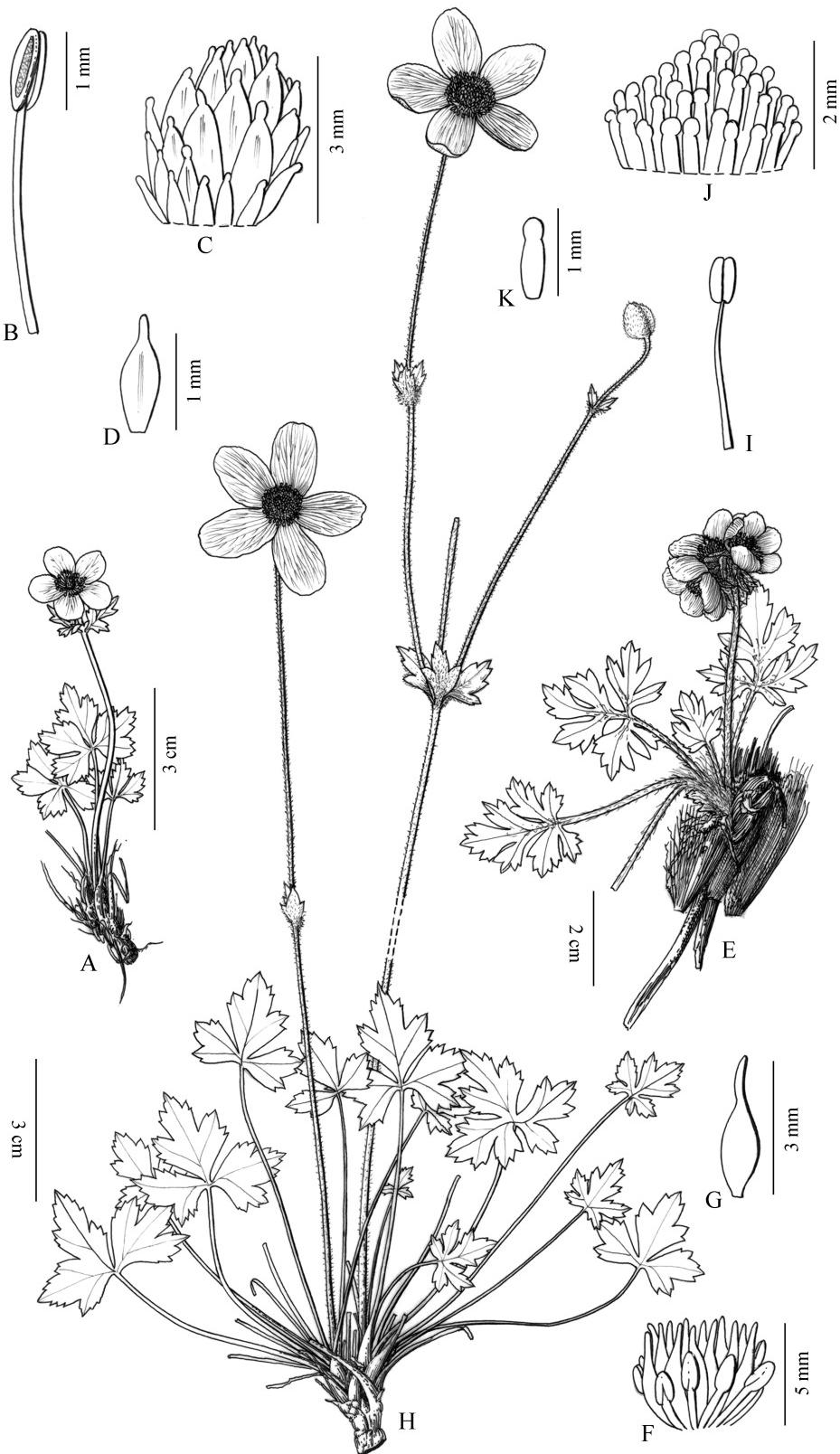


Fig. 1 A-D. *Anemone motuoensis* A. habit, B. stamen, C. gynoecium, D. carpel. (from holotype) E-G. *A. brachystema* E. habit, F. androecium and gynoecium, G. carpel. (from holotype) H-K. *A. jiachaensis* H. habit, I. stamen, J. gynoecium, K. carpel. (from holotype)

broadly conical, 2 mm long, 3 mm in diam.; carpels ca. 70, sessile, styleless; ovaries terete-ovoid, 0.5–0.7 mm long, glabrous; stigmata subglobose, 0.2–0.3 mm in diam.

Xizang Autonomous Region: **Jiacha** Xian, near city, alt. 3 400 m, on terrace in valley, herbs 25–30 cm tall, fls. white, anthers yellow, 1980–08–02, Z. C. Ni, Ci Duo & Ci Dan 2734 (**holotype**, PE).

This species is characterized by each plant having more (ca. 12) basal leaves and each gynoecium consisting of ca. 70 carpels, and by these two characters it can be distinguished from all other Chinese species of sect. *Stolonifera*, in which each plant has (0–) 1–2 (–3) basal leaves, and each gynoecium consists of 4–16 carpels (Wang, 1980; Tamura, 1995).

Acknowledgements: I am grateful to Prof. Z. Y. Su for revising the Latin diagnoses, and to Mr. Sun Ying-Bao for making the line drawings.

References:

- Tamura M, 1995. *Anemone* [A]. In: P. Hiepko (ed.), *Die natürlichen Pflanzenfamilien* [M]. Zwei Aufl. Berlin: Duncker & Humblot, **17a** (4): 324—349
- Wang WT (王文采), 1980. *Anemone* [A]. In: Flora Republicae Popularis Sinicae (中国植物志) [M]. Beijing: Science Press, **28**: 1—56
- Ziman SM, Ehrendorfer F, Keener CS et al., 2007. Revision of *Anemone* sect. *Himalayicae* (Ranunculaceae) with three new series [J]. *Edinburg Journal of Botany*, **64** (1): 51—99
- Ziman SM, Bulakh EV, Kadota Y et al., 2008. Modern view on the taxonomy of the genus *Anemone* L. sensu stricto (Ranunculaceae) [J]. *The Journal of Japanese Botany*, **83**: 127—155